
Typification of Two Linnaean Names in the Basellaceae

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ABSTRACT. During the writing of the treatment of Basellaceae for *Flora Mesoamericana* it became apparent that typification of the Linnaean names *Basella alba* L. and *B. lucida* L. required clarification. A note to formally fix the application of these two names is provided here.

The genus *Basella* consists of five species, four in east and southeast Africa and Madagascar, the other pantropical and widely cultivated (Sperling, 1987). The three Linnaean names for species of *Basella* are now considered conspecific, and typification of two of these names is clarified below.

In *Species Plantarum*, Linnaeus first described two species of *Basella* L., *B. rubra* L. and *B. alba* L. These two species were distinguished on a single leaf character: *Basella rubra* was described as “*Basella foliis planis*,” while *Basella alba* in contrast was described as “*Basella foliis undatis*” (Linnaeus, 1753: 272). A third species, *Basella lucida* L., was described by Linnaeus in 1759, differing from the other two in having subcordate, rather than ovate, leaves and densely terminally branched, rather than simple, peduncles.

Basella rubra, *B. alba*, and *B. lucida* were first treated as a single species by Roxburgh (1832), who used the name *B. alba*. Within *B. alba* Roxburgh recognized five “varieties,” based on local taxonomic knowledge, and he listed these five subgroups as two “wild sorts” and three “cultivated sorts” (Roxburgh, 1832: 275). Graham (1839) followed Roxburgh’s account, but was erroneously credited by Smith (1981) as the first to combine the names under *B. alba*. Baillon (1887), on the other hand, considered *B. alba* a variety of *B. rubra*, and several authors subsequently followed that work and accepted *B. rubra* as the name for the single species. As Roxburgh (1832) was the first author to place *B. alba* and *B. rubra* in synonymy, and in doing so adopted *B. alba*, it (and not *B. rubra*) is the correct name under Article 11.5 of the *Code* (see van Steenis, 1957; Smith, 1981, and references therein; Greuter et al., 1994). Additionally, *B. alba* is the name in current use, and the types designated here are intended to maintain this usage.

Basella rubra was lectotypified by Verdcourt

(1968), who selected the unpublished drawing of a fruiting plant in Herb. Hermann 5: t. 207 (lectotype, BM) that formed the basis for Linnaeus’s *Flora Zeylanica* account, a choice Smith (1981) also suggested as a logical lectotype and that has been followed by Kellogg (1988). *Basella rubra* L. was accepted as the type of the genus *Basella* L. by Jarvis et al. (1993).

The types of *Basella alba* L. and *B. lucida* L. have not previously been clarified. A single synonym from Thran (Hort. Carolsruh. 11, n. 125. 1747), “*Basella flore albo, foliis & caulibus viridibus*,” was cited in the original description of *B. alba*, and this has subsequently been cited as the type of *B. alba* (miscited as Thran, Hort. Carolsruh. 10, n. 100. 1747, by Verdcourt, 1968; Sperling, 1987; and Kellogg, 1988). However, the synonym in the protologue does not have a visual element and it cannot therefore serve as the type, which must be a single specimen or illustration (Greuter et al., 1994: Art. 8.1). There are no extant original elements for the name *Basella alba*. Three specimens annotated as *B. alba* exist in the Linnaean herbarium in Stockholm. However, none are annotated by Linnaeus and therefore cannot be considered original material for the name and eligible for lectotypification. A neotype is therefore required to formally fix the application of the name *Basella alba*.

In *Species Plantarum* edition 2 (1762: 390), Linnaeus added a reference to an illustration of *Basella alba* in Plukenet (1691: tab. 63, fig. 1). Plukenet (1696: 252) used the polynomial “*Mirabili Peruviana affinis tinctoria Betaefolio scandens*” for the species and cited the illustration in van Rheedee (*Hortus Malabaricus* 7, tab. 24. 1688) under that name. The plate in Plukenet clearly illustrates *Basella alba* L. as it is now circumscribed. Having cited the distribution of *Basella alba* as “Syria?” (Linnaeus, 1753: 272) in the first edition of *Species Plantarum*, Linnaeus followed Plukenet in 1762, stating that *B. alba* was from China. As possible neotypes, the Chinese specimens available were considered of rather poor quality. Therefore, the neotype selected here is a specimen with plenty of

fertile material, and detailed locality data, from Nepal.

Although *Basella lucida* L. was recognized by Moquin-Tandon (1849) as a distinct species, it has otherwise been considered a synonym of *B. alba* L. by most authors since Linnaeus. In his treatment of the three species of *Basella*, Linnaeus (1762: 391) added a note that the species were clearly very closely related: "*Affines nimium sunt hae tres species, sed constantes se servant in hortis.*" The short description of *B. lucida* (Linnaeus, 1762) fits within the current circumscription of *Basella alba*, and there is no doubt that the name should be placed in synonymy.

The nomenclature and synonymy of Linnaean names within *Basella* are as follows:

Basella alba L., Sp. Pl. 272. 1753. TYPE: Nepal. Mahakali Zone: Kanchapur District, 15 mi. W of Dhangarhi, 7 Dec. 1966, *Nicolson 2848*, (neotype, BM; isoneotype, US not seen).

Basella lucida L., Sp. Pl. (ed. 2) 391. 1762. TYPE: Taiwan. Taipeh, May 1909, *Faurie 109* (neotype, BM).

Basella rubra L., Sp. Pl. 272. 1753. TYPE: Herb. Hermann 5 t. 207 (lectotype, designated by Verdcourt (1968), BM).

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